Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. Canceled.

2. (Currently Amended) The wireless mouse ~~device~~ of claim ~~1~~16 wherein

said routines for controlling the operation of said input device comprise a routine for keeping the transceiver at a lowered power level during the periods where the transceiver is not exchanging data with said host transceiver unit.

3. (Currently Amended) The wireless ~~input device~~ mouse of claim 2 wherein

said routines for controlling the operation of said ~~input device~~ mouse comprise a routine for adjusting the rate of data exchange between said device and said host transceiver unit to a higher rate when said device is transmitting data to said host transceiver unit, from a lower rate used for maintaining a synchronized link with said host transceiver unit.

4. (Currently Amended) The wireless mouse ~~input device~~ of claim ~~1~~16 wherein

said routines for controlling the operation of said ~~input device~~ mouse comprise a routine for powering down the transceiver and said processor if the ~~device~~ mouse remains in an idle state for more than a predetermined time period.

5. (Currently Amended) The wireless ~~input device~~ mouse of claim 4 wherein

said routines for controlling the operation of said ~~input device~~mouse comprise:

a routine for powering up said processor and said transceiver in response to an input to said ~~device~~mouse, and

a routine for re-establishing a link with said device.

6. (Currently Amended) The wireless ~~input device of~~mouse of claim ~~1~~16 wherein

said power circuit comprises a voltage regulator to adjust the output voltage of said battery to a level desired for the operation of said processor.

7. (Currently Amended) The wireless ~~input device~~ mouse of claim 6 wherein voltage regulator lowers the output voltage.

8. (Currently Amended) The wireless ~~input device~~mouse of claim 6 wherein voltage regulator boosts the output voltage.

9. (Currently Amended) The wireless ~~input device~~ mouse of claim ~~1~~16 further comprising a motor connected with same processor and said power circuit to provide vibration feedback to an operator of said ~~device~~mouse.

10. (Currently Amended) The wireless ~~input device~~mouse of claim 9 wherein

said routines for controlling the operation of said ~~input device~~ mouse further comprise a routine for:

monitoring the battery voltage, and

scaling the drive to said motor as a function of said battery voltage to provide a substantially constant motor output force regardless of the battery voltage.

11. (Currently Amended) The wireless ~~input device~~ mouse of claim 9 wherein

said routines for controlling the operation of said ~~input device~~ mouse further comprise a routine for providing a maximum motor output force at a minimum battery level

12. (Currently Amended) The wireless ~~input device~~ mouse of claim 9 wherein

said routines for controlling the operation of said ~~input device~~ mouse further comprise a routine for:

reducing the power delivered to said motor when said battery's voltage level is below a first threshold, and

indicating the battery level to an operator of said ~~device~~ mouse.

13. (Currently Amended) The wireless mouse ~~input device~~ of claim 12 wherein

said reducing the power delivered to said motor when said battery's voltage level is below a threshold, includes:

reducing the power to said motor to zero, when said battery's voltage level is below a second threshold, which is lower than said first threshold, and

indicating the battery level to an operator of said device.

14. (Currently Amended) The wireless ~~input device~~ mouse of claim ~~1~~16 further comprising a plurality of visual indicators connected with said processor and said power circuit, configured to display status information to an operator of said ~~device~~ mouse.

15. (Currently Amended) The wireless ~~input device~~ mouse of claim 14 wherein

said routines for controlling the operation of said ~~input device~~ mouse further comprise a routine for:

activating one of a plurality of said visual indicators when there is a change in said status information, and

deactivating said same one visual indicators after a predetermined delay period.

16. (Currently Amended) A wireless mouse configured to establish a link with a host computer, said ~~device~~ mouse comprising:

a transceiver for transmitting data to and receiving data from a host transceiver unit, wherein said host transceiver unit is connected with said host;

a processor connected with said transceiver and configured to process data from said host and said wireless mouse;

a power circuit connected with said processor and configured to regulate the power usage of said wireless mouse, wherein said power circuit comprises:

a battery,

a computer readable media having instructions thereon, wherein said instructions comprise

routines for monitoring the operational state of said wireless mouse, and

routines for controlling the operation of said human interface device using said operational state of said wireless mouse, wherein said routines for controlling the operation of said wireless mouse comprise a routine for keeping the transceiver off during the periods where the transceiver is not exchanging data with said host transceiver unit.

Claim 17. Canceled.

18. (Previously Presented) A wireless gaming input device configured to establish a link with a remote host, the input device being configured to input control information used to run a game application on the host, said device comprising:

a transceiver for transmitting data to and receiving data from a host transceiver unit, wherein said host transceiver unit is connected with said host;

a processor connected with said transceiver and configured to process data from said host and said human interface device;

a power circuit connected with said processor and configured to regulate the power usage of said human interface device, wherein said power circuit comprises:

a battery,

a computer readable media having instructions thereon, wherein said instructions comprise

routines for monitoring the operational state of said human interface device, and

routines for controlling the operation of said human interface device using said operational state of said human interface device, wherein said routines for controlling the operation of said human interface device comprise a routine for powering down the transceiver and said processor if the device remains in an idle state for more than a predetermined time period,

wherein said host runs said application according to inputs received via said input device.

19. (Currently Amended) A wireless -input device configured to input control information to a remote host, said device comprising:

a transceiver for transmitting data to and receiving data from a host transceiver unit, wherein said host transceiver unit is connected with said host;

a processor connected with said transceiver and configured to process data from said host and said human interface device;

a power circuit connected with said processor and configured to regulate the power usage of said human interface device, wherein said power circuit comprises:

a battery,

a computer readable media having instructions thereon, wherein said instructions comprise

routines for monitoring the operational state of said human interface device, and

routines for controlling the operation of said human interface device using said operational state of said human interface device, wherein said routines for controlling the operation of said human interface device further comprise a routine for monitoring the battery voltage, and

scaling the drive to said motor as a function of said battery voltage to provide a substantially constant motor output force regardless of the battery voltage,

wherein said device is a mouse~~, gamepad,~~ or joystick.

Claim 20. Canceled.